

## ABSTRACT OF THE DISCLOSURE

The present invention relates to a multi-directional ball switch, which simplifies a complicated switching system equipped in an electronic instrument to be quickly operated by constructing a ball switch of which the rotational direction of the ball is specifically controlled by using numbers of wheels and frictional force of click encoders, and operation method thereof.

A multi-directional ball switch in accordance with the present invention comprises: a panel having 4 diagonally-located fixtures, each of which has an orthogonal shaft-hole; a ball knob placed on the panel; a conversion means that transforms the rotation of the ball knob into an electric signal; a CPU connected to the conversion means and to a sound generation section; a switching section which restrains the rotation of the ball knob and selectively generates an output from CPU; and a signal generation section connected to CPU. And thus, it can be quickly controlled by reducing finger movement as well as be conveniently used without requiring an extra training.